# The genus Kinesis Burr (Dermaptera: Chelisochidae)

By A. BRINDLE

The genus *Kinesis* is distinguished from all other genera of the Chelisochidae by the short elytra, each elytron having a well marked lateral longitudinal explanate margin or ridge; wings are absent. The genus was erected by Burr (1907:126) for one species, *Chelisoches punctulatus* Burr, 1897, which was described from a single female. Burr (1911:63), however, includes a description of the male forceps in his citation of the genus, and this appears to be due to a record of a male and a female of the same species in the Vienna Museum (Burr, 1912:92). The appearance of another name, *Kinesis mounseyi* Burr, in an account of the male genitalia of the Dermaptera (Burr, 1916:9), presents a puzzle, since, whilst no indication is given that this represents a new species, no previous description of this species can be found. It has not been traced in the Zoological Record.

Apart from the original description of *punctulata* and a very short description and figure of the male genitalia of *mounseyi*, nothing has been published on these species, so it was felt useful to re-examine the available material of the genus and to publish descriptions and figures of both species. The types of *punctulata* and *mounseyi*, and the recorded specimens of *punctulata* in the Vienna Museum, have been examined; for these I am indebted to Mr J. Huxley of the British Museum (Natural History) and Dr A. Kaltenbach, of the Vienna Museum, respectively. Apart from the descriptions and figures given in the present paper, a key to the species is included and notes on the specimens.

The specimens from Vienna consist of one male and one female, but although (Burr (1912:92) lists the male from Java and the female from Celebes, both are from this latter island, and the mention of Java is an error. The specimens are clearly conspecific with the type of *punctulata* on external

characters.

Regarding the confusion about the status of *mounseyi*, it is worth noting that Burr regularly used the usual "sp.n." when describing any of his numerous new species, and the lack of this indication in the case of *mounseyi* appears to be due to the author being engaged on business other than entomology when the paper was in press. The three parts of the paper on the male genitalia of the Dermaptera were published in 1915 (parts 1 and 2) and 1916 (part 3), and it is in this last part that the name *Kinesis mounseyi* appears. The paper was communicated to the Royal Microscopical Society by Mr John Hopkinson, and evidently only the first two parts were checked in proof form by the author, for a footnote on the last page of the 1916 paper reads "As Captain Burr is with H.M. Forces somewhere in the East, and has been unable to correct the

revise (sic) of this part of his paper, it has been submitted to Mr Hopkinson . . . . . . ". This evocative sentence conceals Burr's adventures in the Middle East during the first World War, when he appears to have developed such an interest in in that region that his work on Dermaptera almost ended; very little was published by Burr on Dermaptera after that date. His interest in the Middle East or at least Eastern Europe, however, dates much further back than the first War, as related by him in his book "Slouch hat", but the interest seems to have become more dominant after that time, ending tragically in his death in a street accident in Istanbul.

The unfortunate result of this cessation of work on the Dermaptera is that a number of queries have remained unanswered, amongst them the case of K. mounseyi. No subsequent correction has been traced, but, in spite of the lack of indication in the 1916 paper, the name and the date must stand. The short description of two and a half lines entirely refers to the male genitalia, which is figured on plate II, figure 9, but this seems to be sufficient for the name to be valid. may also be noted that Burr (1914) described Nesogaster mounseyi, also from the Philippine Islands, and collected by the same collector from the same locality as Kinesis mounseyi, and it is not known why this latter species was not described at the same time.

#### Key to species

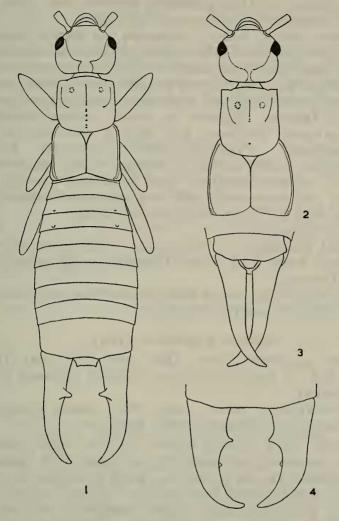
- 1. Pronotum transverse (fig. 1); abdominal puncturation somewhat weaker; paler species, smaller in size, body length less than 10 mm Philippine Islands .....
  - mounseyi Burr
- Pronotum longer than broad (fig. 22); abdominal puncturation rather stronger; darker species, larger in size, body length usually over 10 mm. Celebes ..... punctulata Burr

### Kinesis mounseyi Burr

Kinesis mounseyi Burr, 1916, J. R. micr. Soc. 1916: 9, fig. 9 pl. II (dholotype, dparatype, Philippine Islands; British Museum (Natural History)).

Head reddish-yellow; antennae yellowish-brown, first segment darker; pronotum brown, lateral margins yellowish: elytra brown, somewhat translucent; legs yellowish; abdomen and forceps reddish-brown. Cuticle of head almost smooth and impunctate, that of pronotum and elytra coriaceous, impunctate; cuticle of abdominal tergites, except last, punctured on basal two-thirds or more, leaving a smooth posterior border, the punctures large and deep, separated by about their own diameter, and more marked on basal half of tergite, distal part having shallower punctures; last tergite almost smooth. Cuticle of head, and abdomen shining, that of pronotum and elvtra duller.

Male (fig. 1): head transverse, swollen on occiput behind each eye, the swollen areas not touching on vertex but leaving



Kinesis:

fig. 1, K. mounseyi, male type; figs. 2, 3, K. punctulata, female type; fig. 4, K. punctulata, male forceps.

a depressed area separating each area; eyes small. First antennal segment nearly as long as distance between the antennal bases, second segment transverse, third segment twice as long as broad or rather longer, fourth segment one and half times as long as broad, fifth segment intermediate in length between third and fourth; distal segments elongated, two and half times as long as broad, evenly narrowed to bases, apex rounded. Pronotum transverse, lateral margins slightly rounded, and with a rather wide explanate lateral margin; a well marked longitudinal median furrow present on anterior half of pronotum, the furrow much less marked on posterior half; two shallow circular depressions occur towards the anterior margin on each side of the disc. Elytra short, exposing a scutellum, each elytron with a well marked lateral explanate margin forming a lateral ridge. Legs with femora broadened, second segment of tarsi produced beneath the third, tarsal

segments with numerous short ventral hairs.

Abdomen broad, lateral tubercles on third tergite very small, those on fourth small; last tergite transverse, depressed medially near posterior margin, posterior margin slightly oblique laterally. Penultimate sternite with posterior margin almost evenly rounded, but with apex slightly truncate. Each branch of forceps elliptical in cross section basally and broader, arcuate, glabrous, and with a dorso-median tooth before midpoint. Pygidium short, transverse, declivent, postero-lateral angles slightly produced. Genitalia with short parameres, broader medially and narrowed towards apex, virga long and associated with two elongated dark sclerites. Length of body 9.75 mm., forceps 3-3.25 mm.

Female: unknown.

Material examined: & holotype, & paratype, Mindanao, P.I., Iodayi District, IX/X11 (Mounsey) (British Museum (Natural History)).

The paratype has longer forceps, and the genitalia figured

by Burr (1916) is from the paratype.

#### Kinesis punctulata (Burr)

Chelisoches punctulata Burr, 1897, Ann. Mag. nat. Hist. (6) 20:315 (♀ holotype, Celebes: British Museum (Natural History)).

Kinesis punctulatus (Burr): Burr, 1912, Annln naturh. Mus.

Wien 26: 92 (Java (in error); Celebes).

Generally dark reddish-brown, lighter when somewhat immature: antennae vellowish, first segment dark brown: legs yellowish-brown to dark brown. Cuticle similar to that of

mounseyi but abdominal puncturation rather stronger.

Female: head transverse, lateral margins of occiput behind eyes slightly swollen; eyes small; proportion of antennal segments as in mounseyi. Pronotum slightly longer than broad, anterior lateral angles marked, somewhat acute; pronotum almost parallel-sided, posterior margin convex; elytra short (fig. 2). Abdomen broad, lateral tubercles on third tergite almost absent, those on fourth very large; last tergite transverse, small depressed near posterior margin between the branches of the forceps. Penultimate sternite extended in type, showing from a dorsal view-point (fig. 3). Each branch of forceps elliptical in cross section, excavated at base, evenly narrowed distally, inner margin slightly crenulated for basal half; apex curved medially; pygidium short, declivent, bluntly triangular (fig. 3). Length of body 11 mm., forceps 2.25 mm.

Male: similar to female; occiput behind eyes more swollen; abdomen broader, widened to last tergite which is very broad; each branch of forceps elliptical in cross section, arcuate, with small inner teeth and smaller isolated crenulations; pygidium not visible (fig. 4). Length of body 13.5 mm., forceps 3 mm. Material examined: ♀ holotype, S. Celebes, Lompa-Battau,

3000 'Marz, 1896 (British Museum) (Natural History)). Other

material: S. Celebes, Bua-Kraeng, 5000 ', Feb., 1896 (H. Fruhstorfer) (Coll. Br. V.W. 20.870) 1 &; Celebes, Loka (Sarasin) 1 Q (Vienna Museum).

The male from the Vienna Museum is large and dark, whilst the female is smaller (body length 10 mm) and lighter in colour, apparently being somewhat immature; the female specimen has lost the branches of the forceps but is otherwise in good condition.

#### REFERENCES

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Burr, M. (1915-1916). On the male genital armature of Dermaptera. Parts 1-3, J. R. micr. Soc., 1915: 413-447. 521-546; 1916: 1-18.

Manchester Museum.

## Notes and Observations

Drepana curvatula Borkhausen: was there a Suffolk Record?—Further to my note in this journal (antea: 79) on the occurrence of a specimen of the Dusky Hooktip in North Norfolk in August 1971, I have come across an interesting reference to an alleged example of the Scarce Hooktip (D. harpagula Esp.) in the Memoirs of the Suffolk Naturalists' Society (1937). The compiler, Claude Morley, in his final catalogue of the Lepidoptera of Suffolk (p. 98), quoting from W. H. Harwood of Colchester, mentions that "that careful collector, Dr Free had a specimen in his collection which he said he took at Stowmarket: we all thought it was a variety of P. falcula until Mr Meek detected it when he purchased Dr Free's collection".

It seems extraordinary that such a "careful collector" as Dr Free should not have been able to distinguish between the Scarce Hooktip (harpagula) and the Pebble Hooktip (falcula) whereas the Dusky Hooktip (curvatula) could have been easily confused as a possible variety of the Pebble Hooktip, as I pointed out in my earlier note.

Suffolk also seems a most unlikely region for *D. harpagula* though Mr Morley says that its usual pabulum, the small-leaved lime, is found sparingly in the county.—C. G. M. DE WORMS, Three Oaks, Woking, Surrey. 19.iv.1972.